TEAC®

FD-505

FEB 24 1994

3.5-Inch/5.25-Inch Dual Floppy Disk Drive

- Standard half-height (42.8mm) dual floppy disk drive
- 1.0/1.6MB and 1.0/2.0MB capacity
- Direct drive spindle for high reliability (micro floppy disk drive)
- Low power consumption

Introducing the Standard Half-Height Dual Floppy Disk Drive that Accommodates Today's Multi-Media.

Only TEAC meets today's demands for small and lightweight PC systems with one drive unit that accommodates today's multi-media — both 3.5-inch micro floppy disks and 5.25-inch mini floppy disks. The FD-505 Dual Floppy Disk Drive can give PC users a variety of multi-media combinations without external hardware. It lets them select freely from among data capacities (1.0/1.6MB and 1.0/2.0MB). And its standard half-height (42.8mm) lets you respond to market demands with no change in your design.

3.5-Inch/5.25-Inch Dual Floppy Disk Drive FD-505

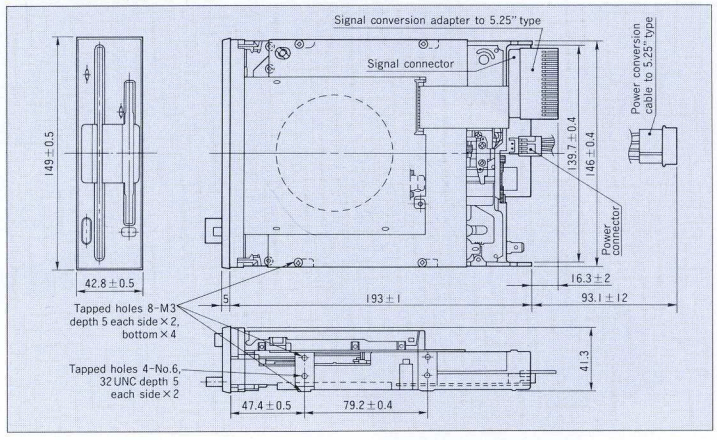
The Dual Drive: TEAC Redefines the Refined Drive.

Specifications

		3.5-inch Micro Floppy Disk Drive	5.25-inch Mini Floppy Disk Drive
Recording Method		FM or MFM	
Media		3.5" micro floppy disks	5.25" mini floppy disks
Motor Starting Time		480msec. or less	
Average Latency Time		100msec. (300 rpm), 83.3msec. (360 rpm)	
Index		1/revolution	
MTBF		20,000 hours or more	
MTTR		35 minutes or less	
Error Rate	Soft read error	$1/10^9$ bits or less	
	Hard read error	$1/10^{12}$ bits or less	
	Seek error	$1/10^6$ seeks or less	
Safety Standard		Complies with UL, CSA and TÜV	
Ambient Temperature	Operating	4~51.7°C (39~125°F)	
	Storage	−22~60°C (−8~140°F)	
	Transportation	−40~65°C (−40~149°F)	
Temperature Gradient	Operating	20°C (36°F)/hour or less (no condensation)	
	Storage and Transportation	30°C (54°F)/hour or less (no condensation)	
Relative Humidity	Operating	20~80% (no condensation) [Max. wet-bulb temperature of 29.4°C (85°F)]	
	Storage	5~90% (no condensation) [Max. wet-bulb temperature of 40°C (104°F)]	
	Transportation	5~95% (no condensation) [Max. wet-bulb temperature of 45°C (113°F)]	
Vibration	Operating	1.0G or less (10~100Hz, 1 oct/min.) 0.35G or less (100~600Hz, 1 oct/min.)	
	Transportation	2G or less (10~100Hz, ¼ oct/min.)	
Shock	Operating	5G or less (half-sine pulse, 11msec.)	
	Transportation	60G or less (half-sine pulse, 11msec.)	
Power Requirements		5V DC±5% (12V DC not required) Permissible ripple : 100mV$_{P-P}$ or less Standby : 3mA typ., 5mA max. During R/W : 0.29A typ., 0.42A max.	● 12V DC±10% Permissible ripple : 200mV$_{P-P}$ or less Standby : 4mA typ., 8mA max. During R/W : 0.24/0.26A typ., 0.4/0.43A max. ● 5V DC±5% Permissible ripple : 100mV$_{P-P}$ or less Standby : 80mA typ., 110mA max. During R/W : 0.17/0.16A typ., 0.23/0.22A max.
Power Consumption	Standby	15mW typ.	0.45W typ.
	During R/W	1.45W typ.	3.73/3.92W typ.
Dimensions (W×H×D) (approx.)		146×41.3×198	
Weight		870g	

			3.5" FDD		5.25" FDD	
			High density	Normal density	High density	Normal density
Data Capacity (Kbyte)	Unformatted	Per track	12.50	6.25	10.416	6.25
		Per disk	2,000	1,000	1,604 (1,666)	1,000
	Formatted (16 sectors/track)*1	Per sector	—	—	0.512	0.256
		Per track	9.216	4.608	7.680	4.096
		Per disk	1,474.56	737.28	1,182.7 (1,228.8)	655.36
Data transfer rate			500	250	500	250/300*2
Single-sided/Double-sided			Double-sided			
Innermost track bit density (bpi)			17,434	8,717	9,646 (9,870)	5,922
Innermost track flux density (frpi)			17,434	8,717	9,646 (9,870)	5,922
Tracks/disk			160		154 (160)	160
Track density			135		96	
Number of cylinders			80		77 (80)	80
Track radius (mm)	Outermost		Side 0 : 39,500 Side 1 : 38,000		Side 0 : 57.150 Side 1 : 55.033	
	Innermost		Side 0 : 24,6875 Side 1 : 23,1875		Side 0 : 37.042 (36.248) Side 1 : 34.925 (34.131)	Side 0 : 36.248 Side 1 : 34.131
Average access time (msec.)			94		91 (94)	94
Track to track time (msec.)			3		3	
Settling time (msec.)			15		15	
Rotation speed (rpm)			300		300/360	

Dimensions (Unit : mm)



*1 The high density is for 15 seconds/track.
*2 Values at 300rpm and 360rpm respectively.
* The value in ( ) is for 160 tracks.
* Specification applied when the MFM recording method is used.

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Features and specifications are subject to change without notice.

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